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ALY. T.J.		
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BIG. J.G.		
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CKSON. D.T.		
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KENNA. F.G.		
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RGAN. R.V.		
TTER. G.L.		
ZZUTO. V.M.		
SING. T.L.		
NDLIN. N.B.		
HWARTZ. J.K.		
TLOCK. G.H.		
EWART. D.L.		
IGER. S.G.		
BIN. P.M.		
ORHEIS. G.M.		
LSON. J.M.		
P.S. MARTIN	✓	✓
L. P-W	✓	✓
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ASSIFICATION:

CNI	
NCLASSIFIED	✓
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UTHORIZED CLASSIFIER SIGNATURE

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I REPLY TO RFP CC NO: N/A

CTION ITEM STATUS
PARTIAL/OPEN N/A
CLOSED

TR APPROVALS:

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LSP-W/CB

EG&G ROCKY FLATS

EG&G ROCKY FLATS, INC.
ROCKY FLATS PLANT, P.O. BOX 464, GOLDEN, COLORADO 80402-0464 • (303) 966-7000

March 13, 1995

95-RF-02489

Peg Witherill
Environmental Restoration Division
DOE, RFFO

TRANSFER OF FEBRUARY 22, 1995 MEETING MINUTES FROM THE INTERFACE MEETING WITH CDPHE AND EPA - LJP-010-95

Action: None required; information only.

The meeting minutes to document the February 22, 1995, interface meeting with DOE, CDPHE, EPA, EG&G and Subcontract personnel are attached. A summary of the meeting follows.

At this meeting, the status of the regulatory analysis for consolidation of pond sediments and the IDM proposal were discussed as old business items from the previous December 8, 1994, interface meeting.

The focused risk assessment of the East Landfill pond water and the seep water was presented in support of canceling the Proposed Action Memorandum (PAM) for seep collection and integrating seep collection with final closure.

The first stage of options analysis was presented. This options analysis was performed to limit the number of options to be considered in the Interim Measures/Interim Remedial Actions/Environmental Assessment Decision Document (IM/IRA/EADD) due to CDPHE and EPA on August 31, 1995.

From this meeting, it appeared that EPA and CDPHE were overwhelmed with information. As you and I discussed, we will step back and provide CDPHE and EPA with a presentation of closure strategies for each affected media within Operable Unit (OU) 7. The OU 7 staff is preparing these strategies for presentation in late March.

Actions from the meeting included: provide EPA with treatment options analysis, provide CDPHE with the date of opening for the new RFETS sanitary landfill and provide CDPHE and EPA with a milestone schedule. The treatment options will be presented at the next options analysis presentation to CDPHE and EPA. I provided Carl Spreng with the opening date of the new RFETS sanitary landfill on February 27, 1995. The OU 7 staff has supported you in

refining and providing documentation of all current milestones. EPA would prefer to see our detailed working schedule but as you and I agree, CDPHE and EPA monitor our milestones-not our schedule.

I look forward to working with you and if you have any questions regarding this transmittal, please feel free to contact me at extension 8553.

Laurie J. Peterson-Wright
Operable Unit 7 Project Manager
OU 5, 6, & 7 Closures
EG&G Rocky Flats, Inc.

LJP:cb

Orig. and 1 cc - M. A. Witherill

Attachment:
As Stated

OPERABLE UNIT 7 AGENCY INTERFACE MEETING
February 22, 1995

AGENDA OVERVIEW

1. Introductions (DOE)	10 minutes
2. Old Business (DOE/EG&G)	20 minutes
3. PAM Update (DOE)	15 minutes
Break	
4. Options Analysis (Stoller/TerraMatrix)	90 minutes
5. Preview of Next Meeting (Stoller)	15 minutes
6. Review of Meeting Minutes (CDPHE/EPA/DOE)	15 minutes

1. Meeting Objectives

The purpose of the meeting is to present DOE's options analysis for landfill closure, reach a consensus on the four alternatives, and discuss other issues related to closure.

The purpose of the following meeting will be to develop a decision matrix for the four alternatives and to use it to determine the recommended alternative that will be presented in the IM/IRA-EA decision document.

Introductions were made and the meeting started.

2. Old Business

Abandonment of Existing Monitoring Wells.
DOE has received CDPHE/EPA approval to abandon wells beneath the footprint of the landfill cap. Chemical monitoring will be discontinued immediately and well abandonment will be scheduled.

DOE has received approval from CDPHE. CDPHE asked when abandonment would occur. DOE replied FY1996. EPA asked how does this affect schedule? DOE replied -- save time in the pre-construction activities.

RCRA/CERCLA Regulatory Analysis of Landfill Closure.
This position paper is undergoing DOE review and will be formally presented at the March 1, 1995, meeting.

DOE said analysis will be transferred to CDPHE by March 1.

Disposition of Investigation-Derived Materials.
This position paper is undergoing EG&G review and will be formally presented at the March 1, 1995, meeting.

DOE said analysis will be transferred to CDPHE by March 1.

3. PAM Update

DOE proposed to defer the seep water management action and combine it with the landfill closure IM/IRA. DOE discussed whether or not the action is "necessary and appropriate." DOE produced risk results.

EPA said that there are other factors to consider besides risk.

EPA stated that the PAM would not have been approved if it was not necessary. EPA also stressed that the action should be efficient and cost effective.

CDPHE said because OU 7 is accelerated they would be more likely to accept rolling the PAM into the IM/IRA DD.

EPA is concerned about the capacity and capability to store and treat the OU 7 water. EPA also said that if the rationale to implement the PAM does not exist, it would be okay to roll it into the IM/IRA. EPA also noted that the pond would eventually be drained.

DOE/EPA/CDPHE all agreed to move forward and not dwell on the past.

4. Options Analysis

Stoller and TerraMatrix presentation of the options analysis.

Presumptive Remedy Approach for Developing Options

- Institutional controls
- Landfill cap
- Landfill gas control
- Source area groundwater control to contain plume

  EPA asked about 30-year particle transport. Discussion was deferred until next meeting.

  CDPHE asked when the new landfill would be open.

- Leachate collection and treatment

Options developed under the presumptive remedy approach must also address soils and sediments derived from the landfill.

Comparative Analysis of Options

Criteria used to compare options and eliminate some of them included effectiveness, implementability, and cost. Groundwater modeling was used to determine which options were viable. The comparative analysis included the following:

- Landfill cap cross sections (4 options); developed in accordance with RCRA guidance; 30-year closure period
- Landfill gas control (2 options): passive or active
- Landfill cover grading plans (5 options); extent of cap/dam in or out--Options 1-4; minimize fill--Option 5
- Groundwater containment: slurry wall vs. drain
- Groundwater collection: wells vs. drain

Scenarios that combined the five capping options with groundwater containment and collection options were modeled. Results of the modeling are as follows:

1. If the dam is left in place, groundwater must be collected above the dam to avoid saturating the landfill to the bottom of the cap.
2. If the dam is removed and the slurry wall encompasses the landfill, groundwater must be collected within the wall to avoid saturating the landfill to the bottom of the cap.
3. There does not appear to be any significant difference in the effectiveness of capturing contaminated particles. Groundwater flows ranged from 0.77 to 1.24 gpm. Higher flows indicate a slightly faster drainage rate.

- Groundwater treatment: new OU 7 facility vs. existing onsite facility

Alternatives Development

Sixteen alternatives were developed by adding the various soils/sediments options to scenarios considered viable based on the groundwater modeling.

Initial Screening

Initial screening of the sixteen alternatives was conducted using effectiveness, implementability, and cost. Effectiveness and implementability are essentially the same for all alternatives. Conceptual capital costs were developed for each alternative. Results of the cost comparison included the following:

- Options involving covering, treatment or off-site disposal of soils/sediments were significantly more expensive than consolidating the soils/sediments.
- Four alternatives were retained for detailed analysis.

Description of Four Alternatives

Option 1a
Option 2a
Option 2d
Option 5a

Detailed Analysis of Alternatives

Refinement of Alternatives

- Modeling showed a high number of particles moving through the slurry wall, so the permeability of the slurry wall was decreased from 10^{-6} to 10^{-7} cm/sec.
- Modifications to the slurry wall, such as keying to unweathered bedrock and adding a membrane to decrease permeability, are proposed to alleviate potential problems due to the inferred fault.
- Option 6, a passive treatment option, was added to address the high cost of groundwater treatment over 30 years. Analysis of the effectiveness of this option is in progress.

5. Preview of Next Meeting

Continue the detailed analysis of alternatives including:

Evaluation of the Four Alternatives
- Effectiveness
- Implementability
- Cost
- Environmental Impacts

Decison Matrix for the Four Alternatives

Recommended Alternative

EPA and CDPHE would like two weeks to digest information. They requested that the next meeting be delayed until March 8 or March 15.

ACTIONS:

DOE will provide EPA with treatment options analysis.

DOE/EG&G will get date for opening of New Sanitary Landfill.

DOE/EG&G will provide schedules for OU 7.

6. Review of Meeting Minutes

ATTENDEES

Name	Organization	Phone
Laurie Peterson-Wright	EG&G	966-8553
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